

**United States of America  
FEDERAL COMMUNICATIONS COMMISSION  
EXPERIMENTAL  
RADIO STATION CONSTRUCTION PERMIT  
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

WG2XEE

(Call Sign)

XT MO

(Class of Station)

0092-EX-ML-2012

(File Number)

NAME Panasonic Avionics Corporation

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(d i) of the Commission's Rules

Station Locations

- (1) MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 28-06-10; WL 80-38-43
- (2) MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 43-14-01; WL 75-24-25
- (3) MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 37-38-10; WL 122-23-57
- (4) MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 39-50-57; WL 104-40-25
- (5) MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 42-00-30; WL 87-55-22

Frequency Information

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 28-06-10; WL 80-38-43

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 410-420 MHz     | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 450.4-457.6 MHz | MO            | 1M00P0N             | 29.5 W (ERP)     |                           |

This authorization effective July 05, 2012 and  
will expire 3:00 A.M. EST June 01, 2014

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 28-06-10; WL 80-38-43

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 479-484 MHz | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 776-794 MHz | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 806-849 MHz | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 824-849 MHz | MO            | P0N                 | 29.5 W (ERP)     |                           |
| 824-849 MHz | MO            | 1M00P0N             | 29.5 W (ERP)     |                           |
| 824-849 MHz | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 824-849 MHz | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 824-849 MHz | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 870-925 MHz | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 876-915 MHz | MO            | 1M00P0N             | 29.5 W (ERP)     |                           |

## Frequency Information

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 28-06-10; WL 80-38-43

| Frequency         | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------------|---------------|---------------------|------------------|---------------------------|
| 1613.8-1626.5 MHz | MO            | 1M00P0N             | 13.7 W (ERP)     |                           |
| 1710-1785 MHz     | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 1710-1785 MHz     | MO            | 1M00P0N             | 13.7 W (ERP)     |                           |
| 1850-1910 MHz     | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 1850-1910 MHz     | MO            | 1M00P0N             | 13.7 W (ERP)     |                           |
| 1900-1920 MHz     | MO            | 1M00P0N             | 1.8 W (ERP)      |                           |
| 1920-1980 MHz     | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 1920-1980 MHz     | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 2010-2025 MHz     | MO            | 1M00P0N             | 1.8 W (ERP)      |                           |
| 2110-2170 MHz     | MO            | 1M00N0N             | 1.8 W (ERP)      |                           |

## Frequency Information

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 28-06-10; WL 80-38-43

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 2400-2497 MHz | MO            | 1M00P0N             | 2.9 W (ERP)      |                           |
| 3400-3600 MHz | MO            | 1M00P0N<br>1M00N0N  | 13.7 W (ERP)     |                           |
| 5150-5250 MHz | MO            | 1M00P0N             | 2.9 W (ERP)      |                           |
| 5725-5825 MHz | MO            | 1M00P0N             | 2.9 W (ERP)      |                           |

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 43-14-01; WL 75-24-25

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 410-420 MHz     | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 450.4-457.6 MHz | MO            | 1M00P0N             | 29.5 W (ERP)     |                           |
| 479-484 MHz     | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 776-794 MHz     | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 806-849 MHz     | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |

## Frequency Information

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 43-14-01; WL 75-24-25

| Frequency         | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------------|---------------|---------------------|------------------|---------------------------|
| 824-849 MHz       | MO            | 1M00P0N             | 29.5 W (ERP)     |                           |
| 824-849 MHz       | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 870-925 MHz       | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 876-915 MHz       | MO            | 1M00P0N             | 29.5 W (ERP)     |                           |
| 1613.8-1626.5 MHz | MO            | 1M00P0N             | 13.7 W (ERP)     |                           |
| 1710-1785 MHz     | MO            | 1M00P0N<br>1M00N0N  | 13.7 W (ERP)     |                           |
| 1850-1910 MHz     | MO            | 1M00P0N<br>1M00N0N  | 13.7 W (ERP)     |                           |
| 1900-1920 MHz     | MO            | 1M00P0N             | 1.8 W (ERP)      |                           |
| 1920-1980 MHz     | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 2010-2025 MHz     | MO            | 1M00P0N             | 1.8 W (ERP)      |                           |

## Frequency Information

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 43-14-01; WL 75-24-25

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 2110-2170 MHz | MO            | 1M00N0N             | 1.8 W (ERP)      |                           |
| 2400-2497 MHz | MO            | 1M00P0N             | 2.9 W (ERP)      |                           |
| 3400-3600 MHz | MO            | 1M00P0N<br>1M00N0N  | 13.7 W (ERP)     |                           |
| 5150-5250 MHz | MO            | 1M00P0N             | 2.9 W (ERP)      |                           |
| 5725-5825 MHz | MO            | 1M00P0N             | 2.9 W (ERP)      |                           |

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 37-38-10; WL 122-23-57

| Frequency        | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|------------------|---------------|---------------------|------------------|---------------------------|
| 410.3125-420 MHz | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 450.4-457.6 MHz  | MO            | 1M00P0N             | 29.5 W (ERP)     |                           |
| 479-484 MHz      | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 776-794 MHz      | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |

## Frequency Information

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 37-38-10; WL 122-23-57

| Frequency         | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------------|---------------|---------------------|------------------|---------------------------|
| 806-849 MHz       | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 824-849 MHz       | MO            | 1M00P0N             | 29.5 W (ERP)     |                           |
| 824-849 MHz       | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 870-925 MHz       | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 876-915 MHz       | MO            | 1M00P0N             | 29.5 W (ERP)     |                           |
| 1613.8-1626.5 MHz | MO            | 1M00P0N             | 13.7 W (ERP)     |                           |
| 1710-1785 MHz     | MO            | 1M00N0N<br>1M00P0N  | 13.7 W (ERP)     |                           |
| 1850-1910 MHz     | MO            | 1M00N0N<br>1M00P0N  | 13.7 W (ERP)     |                           |
| 1900-1920 MHz     | MO            | 1M00P0N             | 1.8 W (ERP)      |                           |
| 1920-1980 MHz     | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |

## Frequency Information

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 37-38-10; WL 122-23-57

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 2010-2025 MHz | MO            | 1M00P0N             | 1.8 W (ERP)      |                           |
| 2110-2170 MHz | MO            | 1M00N0N             | 1.8 W (ERP)      |                           |
| 2400-2497 MHz | MO            | 1M00P0N             | 2.9 W (ERP)      |                           |
| 3400-3600 MHz | MO            | 1M00P0N<br>1M00N0N  | 13.7 W (ERP)     |                           |
| 5150-5250 MHz | MO            | 1M00P0N             | 2.9 W (ERP)      |                           |
| 5725-5825 MHz | MO            | 1M00P0N             | 2.9 W (ERP)      |                           |

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 39-50-57; WL 104-40-25

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 410-420 MHz     | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 450.4-457.6 MHz | MO            | 1M00P0N             | 29.5 W (ERP)     |                           |
| 479-484 MHz     | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |

## Frequency Information

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 39-50-57; WL 104-40-25

| Frequency         | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------------|---------------|---------------------|------------------|---------------------------|
| 776-794 MHz       | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 806-849 MHz       | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 824-849 MHz       | MO            | 1M00P0N             | 29.5 W (ERP)     |                           |
| 824-849 MHz       | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 870-925 MHz       | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 876-915 MHz       | MO            | 1M00P0N             | 29.5 W (ERP)     |                           |
| 1613.8-1626.5 MHz | MO            | 1M00P0N             | 13.7 W (ERP)     |                           |
| 1710-1785 MHz     | MO            | 1M00N0N<br>1M00P0N  | 13.7 W (ERP)     |                           |
| 1850-1910 MHz     | MO            | 1M00N0N<br>1M00P0N  | 13.7 W (ERP)     |                           |
| 1900-1920 MHz     | MO            | 1M00P0N             | 1.8 W (ERP)      |                           |

## Frequency Information

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 39-50-57; WL 104-40-25

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 1920-1980 MHz | MO            | 1M00N0N<br>1M00P0N  | 13.7 W (ERP)     |                           |
| 2010-2025 MHz | MO            | 1M00P0N             | 1.8 W (ERP)      |                           |
| 2110-2170 MHz | MO            | 1M00N0N             | 1.8 W (ERP)      |                           |
| 2400-2497 MHz | MO            | 1M00P0N             | 2.9 W (ERP)      |                           |
| 3400-3600 MHz | MO            | 1M00P0N<br>1M00N0N  | 13.7 W (ERP)     |                           |
| 5150-5250 MHz | MO            | 1M00P0N             | 2.9 W (ERP)      |                           |
| 5725-5825 MHz | MO            | 1M00P0N             | 2.9 W (ERP)      |                           |

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 42-00-30; WL 87-55-22

| Frequency        | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|------------------|---------------|---------------------|------------------|---------------------------|
| 410.3125-420 MHz | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |

## Frequency Information

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 42-00-30; WL 87-55-22

| Frequency         | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------------|---------------|---------------------|------------------|---------------------------|
| 450.4-457.6 MHz   | MO            | 1M00P0N             | 29.5 W (ERP)     |                           |
| 479-484 MHz       | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 776-794 MHz       | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 806-849 MHz       | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 824-849 MHz       | MO            | 1M00P0N             | 29.5 W (ERP)     |                           |
| 824-849 MHz       | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 870-925 MHz       | MO            | 1M00P0N             | 13.7 W (ERP)     |                           |
| 876-915 MHz       | MO            | 1M00P0N             | 29.5 W (ERP)     |                           |
| 1613.8-1626.5 MHz | MO            | 1M00P0N             | 13.7 W (ERP)     |                           |
| 1710-1785 MHz     | MO            | 1M00N0N<br>1M00P0N  | 13.7 W (ERP)     |                           |

## Frequency Information

MOBILE: Temporary Fixed, Aircraft on the Ground, within 1 km, centered around NL 42-00-30; WL 87-55-22

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 1850-1910 MHz | MO            | 1M00P0N<br>1M00N0N  | 13.7 W (ERP)     |                           |
| 1900-1920 MHz | MO            | 1M00P0N             | 1.8 W (ERP)      |                           |
| 1920-1980 MHz | MO            | 1M00N0N             | 13.7 W (ERP)     |                           |
| 2010-2025 MHz | MO            | 1M00P0N             | 1.8 W (ERP)      |                           |
| 2110-2170 MHz | MO            | 1M00N0N             | 1.8 W (ERP)      |                           |
| 2400-2497 MHz | MO            | 1M00P0N             | 2.9 W (ERP)      |                           |
| 3400-3600 MHz | MO            | 1M00P0N<br>1M00N0N  | 13.7 W (ERP)     |                           |
| 5150-5250 MHz | MO            | 1M00P0N             | 2.9 W (ERP)      |                           |
| 5725-5825 MHz | MO            | 1M00P0N             | 2.9 W (ERP)      |                           |

## Special Conditions:

- (1) Operation is subject to prior coordination with affected Educational Broadband Service/Broadband Radio Service (EBS/BRS) licensees.

**Special Conditions:**

- (2) Operation in the 1710-1755 or 2110-2155 MHz band requires consent of local Advanced Wireless Service (AWS) licensee(s) to avoid interference.
- (3) Operation is subject to prior coordination with the Society of Broadcast Engineers, Inc. (SBE); ATTN: Executive Director; 9247 North Meridian Street, Suite 305; Indianapolis, IN 46260; telephone, (866) 632-4222; FAX, (317) 846-9120; e-mail, [executivedir@sbe.org](mailto:executivedir@sbe.org); information, [www.sbe.org](http://www.sbe.org).
- (4) Licensee is aware that cell phones operating in the 1755-1785 MHz band are not authorized by the FCC in the US and testing is solely for determining interference to avionics equipment.
- (5) Operations in the 421-450 MHz are used by federal radiolocations and are subject to interference from Radars.
- (6) Licensee should coordinate with Fixed Microwave licensees in the test site areas to prevent interference with fixed point to point paths and with possible Temporary Fixed/Mobile point-to-point paths
- (7) Licensee shall exclude the frequencies 413.1-413.125 MHz at Melbourne, FL
- (8) Licensee shall exclude the frequencies 412.525-412.55 MHz at San Francisco, CA
- (9) Licensee shall exclude the frequencies 413.5875-414.675 MHz at Chicago, IL